

## South Dayton Dump and Landfill

### Review Comments for the *OU1 Phase 1A Results and Proposed Monitoring Well and VAS Sampling Locations, Phases 1B and 2A* (Conestoga-Rovers & Associates, January 2014)

**General Comment:** Groundwater samples from the upper 5 feet of the groundwater and soil samples were collected to evaluate the potential sources of the contaminant plumes that could potentially migrate offsite. The analytical results from the Phase 1A investigation are provided with some interpretation, but little or no evaluation of the potential source areas is included. Additionally, tables are included that compare new soil analytical results with the EPA Soil Screening Levels (SSLs); however, the pre-existing data are not compared with these SSLs. Finally, the recommended Phases 1B and 2A activities do not include any additional data collection for source area evaluation. Because the intent of the Phases 1 and 2 activities is to address offsite groundwater migration by treating source areas prior to installing the presumptive remedy, it is unclear how this investigation will proceed.

**General Comment:** According to Section 2.0 of the Phase 1A Work Plan, a groundwater sample was to be collected from the water supply well located 500 feet downgradient of MW-210 at 2447 East River Road. This activity does not appear to have been carried out, nor is there information provided as to when this will be done.

**General Comment:** The tables are numbered incorrectly throughout the report, making their review difficult and confusing.

**Section 1.1, Background, first paragraph, page 1:** The first sentence states that the respondents have conducted remedial investigations since 2008. This is incorrect. The 2007 Remedial Investigation Work Plan (RIWP) was never approved, and the respondents indicated that they wished to voluntarily perform investigations to further evaluate the presumptive remedy that was suggested by EPA. None of the work has been conducted under an RIWP since 2008.

**Section 1.1, Background, second paragraph, page 1:** This paragraph refers to the development of remedial alternatives to control groundwater contamination migrating *from the site*. However, this scope of work addresses groundwater contamination from OU1 only, not from the entire site. The OU2 Remedial Investigation/Feasibility Study (RI/FS) will evaluate contaminated groundwater at the site that is not addressed by the OU1 presumptive remedy.

**Section 1.2.1, Groundwater, page 3:** The report states that certain analytes have reliable detection limits (RDLs) greater than the EPA Regional Screening Levels (RSLs), and that it is not possible to determine groundwater exceedances of RSLs due to limitations with the analytical methods. This is incorrect, as exceedances of the RDLs are still exceedances and should be addressed. Also, concentrations that are less than the RDLs but greater than the method detection limits (MDLs) can be flagged as estimated concentrations greater than the MDLs. In fact, several results for thallium are treated this way in Table 61 (e.g., BH22-13, BH25-13, and BH36-13). In addition, the RDL for arsenic is equal to the MCL for arsenic and should not be included in this discussion.

Additionally, is the current work being completed under the 2007 Quality Assurance Project Plan (QAPP)? If so, Table K.3.2 lists the RDL for thallium as 0.5 micrograms per liter (µg/L) rather than 10

µg/L, and the MDL 0.027 µg/L rather than 4.70 ug/L. These QAPP specifications would allow the tap water RSL of 0.16 µg/L to be screened as a J-flagged value. Please confirm which QAPP is being used to manage this work, and that all methods conform to the approved QAPP. If the work is being performed using methods that are not included in the approved QAPP, there may be newer analytical methods that would provide more accuracy in reaching the RSLs than the methods currently being used. A discussion in the text should be provided that demonstrates that all known methods have been evaluated.

**Section 1.2.2, Soil, page 3:** The comment above also applies to **Section 1.2.2.**

**General Comment:** The *Final Work Plan for Operable Unit 1 (OU1) Groundwater and Data Gap Investigation – Phase 1A* (Conestoga-Rovers & Associates [CRA]; May 10, 2013) uses SSLs for groundwater protection as justification for collecting additional soil samples. However, the soil sample results from the OU1 Phase 1A investigation are only compared against the residential and industrial direct contact RSLs, rather than the SSLs. If the purpose of the soil sampling is to evaluate possible sources of groundwater contamination, then it is not clear why the results are being compared to the direct contact RSLs instead of the SSLs for the protection of groundwater. The presumptive remedy will address any direct contact risks, so screening against direct contact criteria is unnecessary.

**Table 4, Page 7:** The Test Trench (TT)-21 soil results are screened against EPA residential and industrial RSLs; however, screening against the EPA SSLs would be more pertinent for identifying potential source areas.

**Section 10.0, Data Gaps Test Trench Investigation, page 65:** This section states that CRA encountered two drums in TT-28 at 13 feet below ground surface (bgs), excavated the drums, and sampled the drums' contents. However, the summary of the test trench findings shown on Figure 12 indicates that the empty drum carcasses were found in TT-28. In addition, the table containing the analytical results ("Table 10") was not found in the report. Please correct these discrepancies.

**Section 11.0, Proposed DP&L VAS Investigation, page 67:** A vertical aquifer sampling (VAS) location is proposed at the Dayton Power and Light (DP&L) property between borings BH11-13 DP&L and BH12-13 DP&L; however, this proposed location is not shown on Figure 16. In addition, the proposed location is very close to existing VAS boring VAS-27, so it is not clear what additional data the proposed VAS boring would provide.

Additionally, please clarify how the offsite (DP&L) investigation activities will support the onsite remedy decisions for OU1.